The MicroFlyte Joystick for the Atari Computer

and Software Driver v. 2.0 for Flight Simulator II*

OPERATING INSTRUCTIONS

I. EQUIPMENT NEEDED

Atari Computer
TV or Monitor
Disk Drive
Flight Simulator II AT-FS2 v. 1.05

II. LOADING INSTRUCTIONS

A. Turn the computer off.

B. If you have an Atari 800 Series computer, make sure the Atari BASIC cartidge is **NOT** in you computer.

C. Plug the MicroFlyte joystick into Controller Port 1.

D. Turn on the disk drive.

E. When the busy light goes off, insert the MICROCUBE Joystick Driver Disk into the disk drive and close the door.

F. Turn on the computer and monitor.

G. When you boot up the Joystick Driver Disk for the very first time, you will be requested to follow a simple clibration procedure. This procedure allows the software to make a more precise interface between your computer and the MicroFlyte Joystick, and makes the variable gain feature (which is discussed below) possible. After you perform the initial calibration it will not be necessary again unless you decide to operate your MicroFlyte Joystick with another Atari 8-bit computer.

To perform the calibration in the future, simply boot up the disk, and when the copyright screen come on, do not remove the disk, but instead press the "C" key. Then follow the instructions.

H. When the busy light goes off the disk drive, pull out the MICROCUBE Joystick Driver Disk and insert the FLIGHT SIMULATOR II disk.

I. Press RETURN.

J. FLIGHT SIMULATOR II will begin loading and after a minute or so , the menu screen will appear. Enter the program as usual by selecting Monitor tykpe and Flight mode and wait for the window view to appear and instrument panel to settle down.

K. Center the elevator trim and Press the RESET button on the MicroFlyte Joystick to calibrate the controls. Test the controls to assure proper operation before take off. NOTE: Any time the RESET button is pressed, the position of the joystick pots is entered into the computer as the centered position.

L. When first using the MICROFLYTE Joystick you may have a tendency to overcontrol. Learn to move the control stick gently and smoothly. Remember that it does not have to be tapped constantly as a regular joystick, and can be held at any position you desire for completely proportional control.

IMPORTANT NOTICE

Several additional features have been added to ther new version 2.Ø Joystick Driver Disk for the Flight Simulator II as follows:

1) CALIBRATION: As indicated above.
2) JOYSTICK GAIN:
   You can actually change the sensitivity of the joystick after you are operating Flight Simulator in Flight mode. If you move the trim tab (aileron axis) all of the way to

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Several additional features have been added to the new version 2.1 Joystick Driver Disk for the Flight Simulator II as follows:

1) CALIBRATION:

When you first boot up the Joystick Driver Disk you will be requested to follow a simple calibration procedure. First, remove the Write Protect Tab so that the calibration data can be written to the disk. This procedure allows the software to make a more precise interface between your computer and the MicroFlyte Joystick, and makes the variable gain feature(which is discussed below) possible. After you perform the initial calibration it will not be necessary again unless you decide to operate your MicroFlyte joystick with a different computer.

To perform the calibration in the future, simply remove the write protect tab, boot up the disk, and when the copyright screen come on, do not remove the disk, but instead press the "C" key. Then follow the instructions.

2) JOYSTICK GAIN:

You can actually change the sensitivity of the joystick after you are operating Flight Simulator in Flight mode. If you move the trim tab(aileron axis) all of the way to the right for instance, and then press RESET you will notice the aileron indicator on the display screen has less travel when moving the joystick full right or full left. The same principle applies to the pitch trim tab for elevator travel where moving it fully towards you will decrease sensitivity. We recommend you try this because it allows more precise control at higher airspeeds. Moving the trim tabs in the opposite direction from center and then pressing reset will likewise increase joystick sensitivity.

3) TRIM:

Your joystick comes with a preset trim set up by pressing RESET as described in the manual. You can obtain any additional trim adjustments for your own cruise altitude and speed by using the TRIM keys (R and V) on the keyboard.

4) VIEW:

By pressing both throttle buttons at the same time and then moving the joystick slightly right or left or forward or back the 3D view will change. The MicroFlyte joystick selects the side-front views(i.e. right-front or left-front) which join the forward view to form a panorama. This is handy when judging when to turn onto final approach(Rear view is not provided on C-64 except from keyboard).

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3) TRIM:

Your joystick comes with a preset trim set up by pressing RESET as described in the manual. It is also set up for a cruise of about 3500 feet at 2350 RPM. You can set up the cruise adjustment by rolling the elevator trim on your joystick box forward (pitch down) until the instrument panel indicator deflects down just one notch. You can also obtain additional trim adjustments for your own cruise altitude and speed by using the TRIM keys (R and V) on the keyboard.

4) VIEW:

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III. OTHER MODES OF OPERATION

The MICROFLYTE Joystick driver software for other commercial programs will be made available from time to time. Look for drivers for the other flying programs first.

The joystick box can also be used for your own BASIC and machine language programs. The calls are as follows:

More on back

		Game Port PIN #
Left - Right pot	PADDLE A	9
Up - Down pot	PADDLE B	5
RESET		6
THROTTLE Up		1
THROTTLE Down		2
FLAPS		4
BRAKE		3

A simple BASIC program example follows:

```
10 PRINT "Test of MicroFlyte Joystick"
20 REM A = LEFT/RIGHT POT; B = UP/DOWN POT
30 A = PEEK (624)
40 B = PEEK (625)
50 PRINT: PRINT: PRINT A: PRINT B
60 FOR I = 1 TO 100
70 NEXT I
80 PRINT CHR$ (125)
90 GOTO 30
```

Normally paddle (or pot) values returned are a progression from a value of 0 to 228. For paddle (A) to right increase value, for paddle (B), down or foward increases the value returned.

Notes:

1) Lines 60 and 70 simply slow down the inputs to make it easier to read them
2) Lines 30 and 40 may also be replaced by:

```
30 A = PADDLE(0)    40 B = PADDLE(1)
```

3) To test on game port #2, change the PADDLE arguments to PADDLE(2) AND PADDLE(3)

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